

**REMARKS****Status of Claims**

Applicant respectfully requests reconsideration of the instant application in view of the above amendments and the following remarks. Upon entry of this Amendment, claims 12, 14-19 and 22-25 are pending in this application. Claims 1-11, 13, 20 and 21 have been canceled. Claims 12, 14-18 and 22 have been amended. Claims 23-25 have been added. These changes are believed to introduce no new matter. Entry and consideration of this Amendment are respectfully requested.

**Objection to Specification**

The Examiner has objected to the Specification for stating "by either" on page 14, line 20. This word has been amended to "by either". Accordingly, Applicant respectfully requests that this objection be withdrawn.

**Information Disclosure Statement**

An Information Disclosure Statement (IDS) filed on March 26, 2004 cited and submitted a copy of a Japanese Office Action issued in the priority application JPA 2001-188236. The Examiner states that this document was not found in the application file. As evidence of this submission, a copy of a stamped postcard dated March 26, 2004 is attached herewith. Also attached is a copy of the Japanese Office Action, as well as a copy of the Form PTO-1449 filed with this IDS. Consideration of this document is requested.

**Claim Objections**

Claim 14 is objected to under 37 C.F.R. § 1.75(a) as allegedly failing to particularly point out and distinctly claim the subject matter which the applicant regards as his invention or discovery. In particular, the Examiner asserts that the phrase "at least pulses" is unclear. Claim 14, as amended, recites "at least three types of the transfer pulses." Applicant respectfully requests that any lack of clarity has been removed and that this objection be withdrawn.

**Rejections under 35 U.S.C. §§ 102 and 103**

Claims 1-4 and 7-22 are rejected under 35 U.S.C. § 102(b) as being allegedly anticipated by U.S. Patent No. 6,166,831 to Boyd et al. ("Boyd"). In addition, claims 5 and 6 are rejected under 35 U.S.C. §103 as being unpatentable over Boyd in view of U.S. Patent No. 6,163,342 to Suzuki ("Suzuki"). Applicant respectfully requests that these rejections be withdrawn for at least the following reasons.

In each of independent claims 12 and 22 of the present application, a shift register serially transfers signals from a first element array in response to transfer pulses. Also, a second shift register serially transfers signals from a second element array in response to the transfer pulses. The first and second element arrays have a plurality of photoelectric conversion elements arranged in a line. Therefore, the shift registers according to the present invention transfer image signals obtained in photoelectric conversion elements.

Boyd does not disclose or suggest this kind of shift register. Rather, Boyd discloses a CMOS sensor. *See, e.g.*, Boyd at column 1, lines 46-52, and column 3, lines 44-47). A shift register used in the CMOS sensor is not for shifting image signals but for shifting signals to select pixels. In Figures. 2 and 4 of Boyd et al., the shift registers 42b, 44b shift selecting signals that are used for selecting switches to be closed among a plurality of switches 42 and 43.

Further technical differences exist between Boyd and the claimed invention. For instance, in dependent claims 14 and 16, the image signals serially transferred in the shift register are added by the image signals of adjacent elements. Boyd fails to teach or suggest a signal adding operation. Instead, Boyd merely discloses a signal arrangement operation. *See, e.g.*, Boyd at Figure 5 and at column 4, lines 11-16. Moreover, MUX 22d in Figure 6 of Boyd does not perform the signal adding operation but just arranges signals in 3 lines to provide RGB color signals.

Moreover, Suzuki fails to overcome the deficiencies of Boyd. Accordingly, Applicant respectfully requests that these rejections be withdrawn.

**CONCLUSION**

Based on the foregoing amendments and remarks, Applicant respectfully requests reconsideration and withdrawal of the rejection of claims and allowance of this application.

**AUTHORIZATION**

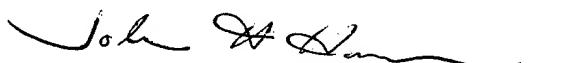
The Commissioner is hereby authorized to charge any additional fees which may be required for consideration of this Amendment to Deposit Account No. 13-4503, Order No. 1232-4729.

In the event that an extension of time is required, or which may be required in addition to that requested in a petition for an extension of time, the Commissioner is requested to grant a petition for that extension of time which is required to make this response timely and is hereby authorized to charge any fee for such an extension of time or credit any overpayment for an extension of time to Deposit Account No. 13-4503, Order No. 1232-4729.

Respectfully submitted,  
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Dated: July 21, 2004

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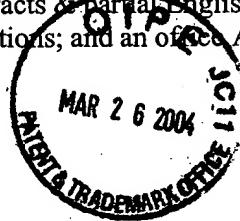
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Serial No.:	09/892,076	Atty: JAH/jx
Filed:	June 26, 2001	Due Date: n/a
For:	IMAGE PROCESSING APPARATUS AND PROCESSING METHOD THEREFOR	

The followings were received in the U.S. Patent and Trademark Office on the date of March 26, 2004, stamped hereon:

1. Information Disclosure Statement & Form PTO-1449; and
2. Copies of 4 Japanese Publications, English abstracts & partial English translation, English translations of 2 priority foreign applications; and an office Action in a counterpart foreign application.



<b>FORM PTO-1449</b> <b>INFORMATION DISCLOSURE CITATION</b>		Attorney Docket: 1232-4729	Serial No.: 09/892,076
		Applicant: Mitsugu HANABUSA	Examiner: to be assigned
		Filing Date: June 26, 2001	Group Art Unit: 2621

**U.S. PATENT DOCUMENTS**

Examiner Initial		Patent Number	Issue Date	Name	Class	Sub-Class	Filing Date
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						

**FOREIGN PATENT DOCUMENTS**

Examiner Initial		Document Number	Publication Date	Country	Class	Sub-Class	Translation
	AH	JPA 3-143160	6/18/1991	JAPAN			English Abstract and partial English translation of page 366, right column, lines 28 to page 367, left column, line 5.
		JPA 8-009143	1/12/1996	JAPAN			English Abstract
	AI	JPA 2000-244819	9/8/2000	JAPAN			English Abstract
	AJ	JPA 2001-094740	4/6/2001	JAPAN			English Abstract

**OTHER DOCUMENTS (Including Author, Title, Date, etc.)**

	AK	English translation of the priority application No. 2000-193376 of the present application and translator's declaration.
	AL	English translation of the priority application No. 2001-188236 of the present application and translator's declaration.
	AM	A copy of the Japanese Office Action issued in the priority application JPA 2001-188236.
	AN	

Examiner

Date Considered

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP §609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.